Sequence Listing

<110> Ashkenazi, Avi J.
Baker, Kevin
Gurney, Austin
Wood, William

<120> Apo-2DcR

<130> P1110

<140> US 08/878,168
<141> 1997-06-18

<160> 17

<210> 1
<211> 259
<212> PRT
<213> Homo sapiens

<400> 1

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Met Ala Arg Ile Pro Lys Thr Leu Lys Phe Val Val Val Ile Val
 1               5                  10                  15

Ala Val Leu Leu Pro Val Leu Ala Tyr Ser Ala Thr Thr Ala Arg
            20                  25                  30

Gln Glu Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln Arg
        35                  40                  45

His Ser Phe Lys Gly Glu Glu Cys Pro Ala Gly Ser His Arg Ser
    50                  55                  60

Glu His Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr
65                  70                  75

Thr Asn Ala Ser Asn Asn Glu Pro Ser Cys Phe Pro Cys Thr Val
            80                  85                  90

Cys Lys Ser Asp Gln Lys His Lys Ser Ser Cys Thr Met Thr Arg
        95                  100                 105

Asp Thr Val Cys Gln Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn
    110                 115                 120

Ser Pro Glu Met Cys Arg Lys Cys Ser Arg Cys Pro Ser Gly Glu
125                 130                 135

Val Gln Val Ser Asn Cys Thr Ser Trp Asp Asp Ile Gln Cys Val
            140                 145                 150
```

```
Glu Glu Phe Gly Ala Asn Ala Thr Val Glu Thr Pro Ala Ala Glu
                155                 160                 165

Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
                170                 175                 180

Glu Thr Met Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
                185                 190                 195

Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
                200                 205                 210

Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu
                215                 220                 225

Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Ser Ser His Tyr
                230                 235                 240

Leu Ser Cys Thr Ile Val Gly Ile Ile Val Leu Ile Val Leu Leu
                245                 250                 255

Ile Val Phe Val
            259
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<210> 2
<211> 1180
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (193) . . . (969)
<223>

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atttttggga gtttgaccag agatgcaagg ggtgaaggag cgcttcctac 100

cgttagggaa ctctggggac agagcgcccc ggccgcctga tggccgaggc 150

agggtgcgac ccaggaccca ggacggcgtc gggaaccata cc atg 195
                                                Met
                                                  1

gcc cgg atc ccc aag acc cta aag ttc gtc gtc gtc atc 234
Ala Arg Ile Pro Lys Thr Leu Lys Phe Val Val Val Ile
  5   10

gtc gcg gtc ctg ctg cca gtc cta gct tac tct gcc acc 273

```
Val Ala Val Leu Leu Pro Val Leu Ala Tyr Ser Ala Thr
 15                  20                  25

act gcc cgg cag gag gaa gtt ccc cag cag aca gtg gcc 312
Thr Ala Arg Gln Glu Glu Val Pro Gln Gln Thr Val Ala
         30                  35                  40

cca cag caa cag agg cac agc ttc aag ggg gag gag tgt 351
Pro Gln Gln Gln Arg His Ser Phe Lys Gly Glu Glu Cys
                 45                  50

cca gca gga tct cat aga tca gaa cat act gga gcc tgt 390
Pro Ala Gly Ser His Arg Ser Glu His Thr Gly Ala Cys
     55                  60                  65

aac ccg tgc aca gag ggt gtg gat tac acc aac gct tcc 429
Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser
             70                  75

aac aat gaa cct tct tgc ttc cca tgt aca gtt tgt aaa 468
Asn Asn Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys
 80                  85                  90

tca gat caa aaa cat aaa agt tcc tgc acc atg acc aga 507
Ser Asp Gln Lys His Lys Ser Ser Cys Thr Met Thr Arg
         95                  100                 105

gac aca gtg tgt cag tgt aaa gaa ggc acc ttc cgg aat 546
Asp Thr Val Cys Gln Cys Lys Glu Gly Thr Phe Arg Asn
                110                 115

gaa aac tcc cca gag atg tgc cgg aag tgt agc agg tgc 585
Glu Asn Ser Pro Glu Met Cys Arg Lys Cys Ser Arg Cys
    120                 125                 130

cct agt ggg gaa gtc caa gtc agt aat tgt acg tcc tgg 624
Pro Ser Gly Glu Val Gln Val Ser Asn Cys Thr Ser Trp
            135                 140

gat gat atc cag tgt gtt gaa gaa ttt ggt gcc aat gcc 663
Asp Asp Ile Gln Cys Val Glu Glu Phe Gly Ala Asn Ala
145                 150                 155

act gtg gaa acc cca gct gct gaa gag aca atg aac acc 702
Thr Val Glu Thr Pro Ala Ala Glu Glu Thr Met Asn Thr
        160                 165                 170

agc ccg ggg act cct gcc cca gct gct gaa gag aca atg 741
Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met
                175                 180
```

```
aac acc agc cca ggg act cct gcc cca gct gct gaa gag 780
Asn Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu
    185                 190                 195

aca atg acc acc agc ccg ggg act cct gcc cca gct gct 819
Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala
            200                 205

gaa gag aca atg acc acc agc ccg ggg act cct gcc cca 858
Glu Glu Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Pro
210                 215                 220

gct gct gaa gag aca atg acc acc agc ccg ggg act cct 897
Ala Ala Glu Glu Thr Met Thr Thr Ser Pro Gly Thr Pro
        225                 230                 235

gcc tct tct cat tac ctc tca tgc acc atc gta ggg atc 936
Ala Ser Ser His Tyr Leu Ser Cys Thr Ile Val Gly Ile
                240                 245

ata gtt cta att gtg ctt ctg att gtg ttt gtt t 970
Ile Val Leu Ile Val Leu Leu Ile Val Phe Val
    250                 255             259

gaaagacttc actgtggaag aaattccttc cttacctgaa aggttcaggt 1020

aggcgctggc tgagggcggg gggcgctgga cactctctgc cctgcctccc 1070

tctgctgtgt tcccacagac agaaacgcct gcccctgccc caaaaaaaaa 1120

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1170

aaaaaaaaaa 1180
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<210> 3
<211> 299
<212> PRT
<213> Homo sapiens

<400> 3

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Met Gln Gly Val Lys Glu Arg Phe Leu Pro Leu Gly Asn Ser Gly
  1               5                  10                  15

Asp Arg Ala Pro Arg Pro Pro Asp Gly Arg Gly Arg Val Arg Pro
                20                  25                  30

Arg Thr Gln Asp Gly Val Gly Asn His Thr Met Ala Arg Ile Pro
                35                  40                  45

Lys Thr Leu Lys Phe Val Val Val Ile Val Ala Val Leu Leu Pro
                50                  55                  60
```

Val Leu Ala Tyr Ser Ala Thr Thr Ala Arg Gln Glu Glu Val Pro
65 70 75

Gln Gln Thr Val Ala Pro Gln Gln Gln Arg His Ser Phe Lys Gly
80 85 90

Glu Glu Cys Pro Ala Gly Ser His Arg Ser Glu His Thr Gly Ala
95 100 105

Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn
110 115 120

Asn Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys Ser Asp Gln
125 130 135

Lys His Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys Gln
140 145 150

Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn Ser Pro Glu Met Cys
155 160 165

Arg Lys Cys Ser Arg Cys Pro Ser Gly Glu Val Gln Val Ser Asn
170 175 180

Cys Thr Ser Trp Asp Asp Ile Gln Cys Val Glu Glu Phe Gly Ala
185 190 195

Asn Ala Thr Val Glu Thr Pro Ala Ala Glu Glu Thr Met Asn Thr
200 205 210

Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Asn Thr
215 220 225

Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Thr Thr
230 235 240

Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Thr Thr
245 250 255

Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Thr Thr
260 265 270

Ser Pro Gly Thr Pro Ala Ser Ser His Tyr Leu Ser Cys Thr Ile
275 280 285

Val Gly Ile Ile Val Leu Ile Val Leu Leu Ile Val Phe Val
290 295 299

<210> 4
<211> 1180

<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (73) . . . (969)
<223>

<220>
<221> sig_peptide
<222> (73) . . . (194)
<223>

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atttttggga gtttgaccag ag    atg caa ggg gtg aag gag 90
                            Met Gln Gly Val Lys Glu
                            -40                 -35

cgc ttc cta ccg tta ggg aac tct ggg gac aga gcg ccc 129
Arg Phe Leu Pro Leu Gly Asn Ser Gly Asp Arg Ala Pro
                -30                 -25

cgg ccg cct gat ggc cga ggc agg gtg cga ccc agg acc 168
Arg Pro Pro Asp Gly Arg Gly Arg Val Arg Pro Arg Thr
    -20                 -15                 -10

cag gac ggc gtc ggg aac cat acc atg gcc cgg atc ccc 207
Gln Asp Gly Val Gly Asn His Thr Met Ala Arg Ile Pro
             -5                  1                   5

aag acc cta aag ttc gtc gtc gtc atc gtc gcg gtc ctg 246
Lys Thr Leu Lys Phe Val Val Val Ile Val Ala Val Leu
                10                  15

ctg cca gtc cta gct tac tct gcc acc act gcc cgg cag 285
Leu Pro Val Leu Ala Tyr Ser Ala Thr Thr Ala Arg Gln
     20                  25                  30

gag gaa gtt ccc cag cag aca gtg gcc cca cag caa cag 324
Glu Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln
             35                  40

agg cac agc ttc aag ggg gag gag tgt cca gca gga tct 363
Arg His Ser Phe Lys Gly Glu Glu Cys Pro Ala Gly Ser
 45                  50                  55

cat aga tca gaa cat act gga gcc tgt aac ccg tgc aca 402
His Arg Ser Glu His Thr Gly Ala Cys Asn Pro Cys Thr
         60                  65                  70
```

```
gag ggt gtg gat tac acc aac gct tcc aac aat gaa cct 441
Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn Asn Glu Pro
                 75                  80

tct tgc ttc cca tgt aca gtt tgt aaa tca gat caa aaa 480
Ser Cys Phe Pro Cys Thr Val Cys Lys Ser Asp Gln Lys
     85                  90                  95

cat aaa agt tcc tgc acc atg acc aga gac aca gtg tgt 519
His Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys
            100                 105

cag tgt aaa gaa ggc acc ttc cgg aat gaa aac tcc cca 558
Gln Cys Lys Glu Gly Thr Phe Arg Asn Glu Asn Ser Pro
110                 115                 120

gag atg tgc cgg aag tgt agc agg tgc cct agt ggg gaa 597
Glu Met Cys Arg Lys Cys Ser Arg Cys Pro Ser Gly Glu
        125                 130                 135

gtc caa gtc agt aat tgt acg tcc tgg gat gat atc cag 636
Val Gln Val Ser Asn Cys Thr Ser Trp Asp Asp Ile Gln
                140                 145

tgt gtt gaa gaa ttt ggt gcc aat gcc act gtg gaa acc 675
Cys Val Glu Glu Phe Gly Ala Asn Ala Thr Val Glu Thr
    150                 155                 160

cca gct gct gaa gag aca atg aac acc agc ccg ggg act 714
Pro Ala Ala Glu Glu Thr Met Asn Thr Ser Pro Gly Thr
            165                 170

cct gcc cca gct gct gaa gag aca atg aac acc agc cca 753
Pro Ala Pro Ala Ala Glu Glu Thr Met Asn Thr Ser Pro
175                 180                 185

ggg act cct gcc cca gct gct gaa gag aca atg acc acc 792
Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met Thr Thr
        190                 195                 200

agc ccg ggg act cct gcc cca gct gct gaa gag aca atg 831
Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu Thr Met
                205                 210

acc acc agc ccg ggg act cct gcc cca gct gct gaa gag 870
Thr Thr Ser Pro Gly Thr Pro Ala Pro Ala Ala Glu Glu
    215                 220                 225

aca atg acc acc agc ccg ggg act cct gcc tct tct cat 909
Thr Met Thr Thr Ser Pro Gly Thr Pro Ala Ser Ser His
```

```
            230                 235

tac ctc tca tgc acc atc gta ggg atc ata gtt cta att 948
Tyr Leu Ser Cys Thr Ile Val Gly Ile Ile Val Leu Ile
240                 245                 250

gtg ctt ctg att gtg ttt gtt t gaaagacttc actgtggaag 990
Val Leu Leu Ile Val Phe Val
        255             259

aaattccttc cttacctgaa aggttcaggt aggcgctggc tgagggcggg 1040

gggcgctgga cactctctgc cctgcctccc tctgctgtgt tcccacagac 1090

agaaacgcct gcccctgccc caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1140

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1180
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<210> 5
<211> 43
<212> DNA
<213> Yeast

<400> 5
tgtaaaacga cggccagtta aatagacctg caattattaa tct 43

<210> 6
<211> 41
<212> DNA
<213> Yeast

<400> 6
caggaaacag ctatgaccac ctgcacacct gcaaatccat t 41

<210> 7
<211> 49
<212> PRT
<213> Homo sapiens

<400> 7

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Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His
  1               5                  10                  15

Leu Arg His Cys Leu Ser Cys Ser Lys Cys Arg Lys Glu Met Gly
                20                  25                  30

Gln Val Glu Ile Ser Ser Cys Thr Val Asp Arg Asp Thr Val Cys
                35                  40                  45

Gly Cys Arg Lys
            49
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<210> 8
<211> 48
<212> PRT
<213> Homo sapiens

<400> 8
Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr Thr Asn Ala Ser Asn
1 5 10 15

Asn Glu Pro Ser Cys Phe Pro Cys Thr Val Cys Lys Ser Asp Gln
20 25 30

Lys His Lys Ser Ser Cys Thr Met Thr Arg Asp Thr Val Cys Gln
35 40 45

Cys Lys Glu
48

<210> 9
<211> 70
<212> DNA
<213> Homo sapiens

<400> 9
gggagccgct catgaggaag ttgggcctca tggacaatga gataaaggtg 50

gctaaagctg aggcagcggg 70

<210> 10
<211> 1799
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (140 . . . (1372)
<223>

<220>
<221> Unsure
<222> 1367
<223> W may be adenine or thymine or uracil

<400> 10
cccacgcgtc cgcataaatc agcacgcggc cggagaaccc cgcaatctct 50

gcgcccacaa aatacaccga cgatgcccga tctactttaa gggctgaaac 100

ccacgggcct gagagactat aagagcgttc cctaccgcca tggaacaacg 150

gggacagaac gccccggccg cttcgggggc ccggaaaagg cacggcccag 200

gacccaggga ggcgcgggga gccaggcctg ggctccgggt ccccaagacc 250

cttgtgctcg ttgtcgccgc ggtcctgctg ttggtctcag ctgagtctgc 300

tctgatcacc caacaagacc tagctcccca gcagagagcg gccccacaac 350

aaaagaggtc cagcccctca gagggattgt gtccacctgg acaccatatc 400

tcagaagacg gtagagattg catctcctgc aaatatggac aggactatag 450

cactcactgg aatgacctcc ttttctgctt gcgctgcacc aggtgtgatt 500

caggtgaagt ggagctaagt ccctgcacca cgaccagaaa cacagtgtgt 550

cagtgcgaag aaggcacctt ccgggaagaa gattctcctg agatgtgccg 600

gaagtgccgc acagggtgtc ccagagggat ggtcaaggtc ggtgattgta 650

caccctggag tgacatcgaa tgtgtccaca aagaatcagg catcatcata 700

ggagtcacag ttgcagccgt agtcttgatt gtggctgtgt ttgtttgcaa 750

gtctttactg tggaagaaag tccttcctta cctgaaaggc atctgctcag 800

gtggtggtgg ggaccctgag cgtgtggaca gaagctcaca acgacctggg 850

gctgaggaca atgtcctcaa tgagatcgtg agtatcttgc agcccaccca 900

ggtccctgag caggaaatgg aagtccagga gccagcagag ccaacaggtg 950

tcaacatgtt gtcccccggg gagtcagagc atctgctgga accggcagaa 1000

gctgaaaggt ctcagaggag gaggctgctg gttccagcaa atgaaggtga 1050

tcccactgag actctgagac agtgcttcga tgactttgca gacttggtgc 1100

cctttgactc ctgggagccg ctcatgagga agttgggcct catggacaat 1150

gagataaagg tggctaaagc tgaggcagcg ggccacaggg acaccttgta 1200

cacgatgctg ataaagtggg tcaacaaaac cgggcgagat gcctctgtcc 1250

acaccctgct ggatgccttg gagacgctgg gagagagact tgccaagcag 1300

aagattgagg accacttgtt gagctctgga aagttcatgt atctagaagg 1350

taatgcagac tctgccwtgt cctaagtgtg attctcttca ggaagtgaga 1400

ccttccctgg tttacctttt ttctggaaaa agcccaactg gactccagtc 1450

agtaggaaag tgccacaatt gtcacatgac cggtactgga agaaactctc 1500

ccatccaaca tcacccagtg gatggaacat cctgtaactt ttcactgcac 1550

ttggcattat ttttataagc tgaatgtgat aataaggaca ctatggaaat 1600

gtctggatca ttccgtttgt gcgtactttg agatttggtt tgggatgtca 1650

ttgttttcac agcacttttt tatcctaatg taaatgcttt atttatttat 1700

ttgggctaca ttgtaagatc catctacaaa aaaaaaaaaa aaaaaaaaag 1750

ggcggccgcg actctagagt cgacctgcag aagcttggcc gccatggcc 1799

<210> 11
<211> 411
<212> PRT
<213> Homo sapiens

<220>
<221> Unsure
<222> 410
<223> Xaa may be leucine or methionine

<400> 11

Met	Glu	Gln	Arg	Gly	Gln	Asn	Ala	Pro	Ala	Ala	Ser	Gly	Ala	Arg	
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Lys	Arg	His	Gly	Pro	Gly	Pro	Arg	Glu	Ala	Arg	Gly	Ala	Arg	Pro	
				20				25						30	
Gly	Leu	Arg	Val	Pro	Lys	Thr	Leu	Val	Leu	Val	Val	Ala	Ala	Val	
				35				40						45	
Leu	Leu	Leu	Val	Ser	Ala	Glu	Ser	Ala	Leu	Ile	Thr	Gln	Gln	Asp	
				50				55						60	
Leu	Ala	Pro	Gln	Gln	Arg	Ala	Ala	Pro	Gln	Gln	Lys	Arg	Ser	Ser	
				65				70						75	
Pro	Ser	Glu	Gly	Leu	Cys	Pro	Pro	Gly	His	His	Ile	Ser	Glu	Asp	
				80				85						90	
Gly	Arg	Asp	Cys	Ile	Ser	Cys	Lys	Tyr	Gly	Gln	Asp	Tyr	Ser	Thr	
				95				100						105	
His	Trp	Asn	Asp	Leu	Leu	Phe	Cys	Leu	Arg	Cys	Thr	Arg	Cys	Asp	
				110				115						120	
Ser	Gly	Glu	Val	Glu	Leu	Ser	Pro	Cys	Thr	Thr	Thr	Arg	Asn	Thr	

125 130 135

Val Cys Gln Cys Glu Glu Gly Thr Phe Arg Glu Glu Asp Ser Pro
140 145 150

Glu Met Cys Arg Lys Cys Arg Thr Gly Cys Pro Arg Gly Met Val
155 160 165

Lys Val Gly Asp Cys Thr Pro Trp Ser Asp Ile Glu Cys Val His
170 175 180

Lys Glu Ser Gly Ile Ile Ile Gly Val Thr Val Ala Ala Val Val
185 190 195

Leu Ile Val Ala Val Phe Val Cys Lys Ser Leu Leu Trp Lys Lys
200 205 210

Val Leu Pro Tyr Leu Lys Gly Ile Cys Ser Gly Gly Gly Gly Asp
215 220 225

Pro Glu Arg Val Asp Arg Ser Ser Gln Arg Pro Gly Ala Glu Asp
230 235 240

Asn Val Leu Asn Glu Ile Val Ser Ile Leu Gln Pro Thr Gln Val
245 250 255

Pro Glu Gln Glu Met Glu Val Gln Glu Pro Ala Glu Pro Thr Gly
260 265 270

Val Asn Met Leu Ser Pro Gly Glu Ser Glu His Leu Leu Glu Pro
275 280 285

Ala Glu Ala Glu Arg Ser Gln Arg Arg Arg Leu Leu Val Pro Ala
290 295 300

Asn Glu Gly Asp Pro Thr Glu Thr Leu Arg Gln Cys Phe Asp Asp
305 310 315

Phe Ala Asp Leu Val Pro Phe Asp Ser Trp Glu Pro Leu Met Arg
320 325 330

Lys Leu Gly Leu Met Asp Asn Glu Ile Lys Val Ala Lys Ala Glu
335 340 345

Ala Ala Gly His Arg Asp Thr Leu Tyr Thr Met Leu Ile Lys Trp
350 355 360

Val Asn Lys Thr Gly Arg Asp Ala Ser Val His Thr Leu Leu Asp
365 370 375

Ala Leu Glu Thr Leu Gly Glu Arg Leu Ala Lys Gln Lys Ile Glu

380 385 390

Asp His Leu Leu Ser Ser Gly Lys Phe Met Tyr Leu Glu Gly Asn
395 400 405

Ala Asp Ser Ala Xaa Ser
410 411

<210> 12
<211> 29
<212> DNA
<213> Homo sapiens

<400> 12
atcagggact ttccgctggg gactttccg 29

<210> 13
<211> 30
<212> DNA
<213> Homo sapiens

<400> 13
aggatgggaa gtgtgtgata tatccttgat 30

<210> 14
<211> 418
<212> PRT
<213> Homo sapiens

<400> 14
Gly Arg Gly Ala Leu Pro Thr Ser Met Gly Gln His Gly Pro Ser
1 5 10 15

Ala Arg Ala Arg Ala Gly Arg Ala Pro Gly Pro Pro Pro Ala Arg
20 25 30

Glu Ala Ser Pro Arg Leu Arg Val His Lys Thr Phe Lys Phe Val
35 40 45

Val Val Gly Val Leu Leu Gln Val Val Pro Ser Ser Ala Ala Thr
50 55 60

Ile Lys Leu His Asp Gln Ser Ile Gly Thr Gln Gln Trp Glu His
65 70 75

Ser Pro Leu Gly Glu Leu Cys Pro Pro Gly Ser His Arg Ser Glu
80 85 90

Arg Pro Gly Ala Cys Asn Arg Cys Thr Glu Gly Val Gly Tyr Thr
95 100 105

Asn Ala Ser Asn Asn Leu Phe Ala Cys Leu Pro Cys Thr Ala Cys
110 115 120

Lys Ser Asp Glu Glu Glu Arg Ser Pro Cys Thr Thr Thr Arg Asn
125 130 135

Thr Ala Cys Gln Cys Lys Pro Gly Thr Phe Arg Asn Asp Asn Ser
140 145 150

Ala Glu Met Cys Arg Lys Cys Ser Thr Gly Cys Pro Arg Gly Met
155 160 165

Val Lys Val Lys Asp Cys Thr Pro Trp Ser Asp Ile Glu Cys Val
170 175 180

His Lys Glu Ser Gly Asn Gly His Asn Ile Trp Val Ile Leu Val
185 190 195

Val Thr Leu Val Val Pro Leu Leu Leu Val Ala Val Leu Ile Val
200 205 210

Cys Cys Cys Ile Gly Ser Gly Cys Gly Gly Asp Pro Lys Cys Met
215 220 225

Asp Arg Val Cys Phe Trp Arg Leu Gly Leu Leu Arg Gly Pro Gly
230 235 240

Ala Glu Asp Asn Ala His Asn Glu Ile Leu Ser Asn Ala Asp Ser
245 250 255

Leu Ser Thr Phe Val Ser Glu Gln Gln Met Glu Ser Gln Glu Pro
260 265 270

Ala Asp Leu Thr Gly Val Thr Val Gln Ser Pro Gly Glu Ala Gln
275 280 285

Cys Leu Leu Gly Pro Ala Glu Ala Glu Gly Ser Gln Arg Arg Arg
290 295 300

Leu Leu Val Pro Ala Asn Gly Ala Asp Pro Thr Glu Thr Leu Met
305 310 315

Leu Phe Phe Asp Lys Phe Ala Asn Ile Val Pro Phe Asp Ser Trp
320 325 330

Asp Gln Leu Met Arg Gln Leu Asp Leu Thr Lys Asn Glu Ile Asp
335 340 345

Val Val Arg Ala Gly Thr Ala Gly Pro Gly Asp Ala Leu Tyr Ala
350 355 360

```
Met Leu Met Lys Trp Val Asn Lys Thr Gly Arg Asn Ala Ser Ile
                365                 370                 375

His Thr Leu Leu Asp Ala Leu Glu Arg Met Glu Glu Arg His Ala
                380                 385                 390

Lys Glu Lys Ile Gln Asp Leu Leu Val Asp Ser Gly Lys Phe Ile
                395                 400                 405

Tyr Leu Glu Asp Gly Thr Gly Ser Ala Val Ser Leu Glu
                410                 415         418
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<210> 15
<211> 74
<212> PRT
<213> Homo sapiens

<400> 15

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Val Met Asp Ala Val Pro Ala Arg Arg Trp Lys Glu Phe Val Arg
  1               5                  10                  15

Thr Leu Gly Leu Arg Glu Ala Glu Ile Glu Ala Val Glu Val Glu
                20                  25                  30

Ile Gly Arg Phe Arg Asp Gln Gln Tyr Glu Met Leu Lys Arg Trp
                35                  40                  45

Arg Gln Gln Gln Pro Ala Gly Leu Gly Ala Val Tyr Ala Ala Leu
                50                  55                  60

Glu Arg Met Gly Leu Asp Gly Cys Val Glu Asp Leu Arg Ser
                65                  70              74
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<210> 16
<211> 78
<212> PRT
<213> Homo sapiens

<400> 16

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Val Val Glu Asn Val Pro Pro Leu Arg Trp Lys Glu Phe Val Arg
  1               5                  10                  15

Arg Leu Gly Leu Ser Asp His Glu Ile Asp Arg Leu Glu Leu Gln
                20                  25                  30

Asn Gly Arg Cys Leu Arg Glu Ala Gln Tyr Ser Met Leu Ala Thr
                35                  40                  45

Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala Thr Leu Glu Leu Leu
                50                  55                  60
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Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly Cys Leu Glu Asp
65 70 75

Ile Glu Glu
78

<210> 17
<211> 77
<212> PRT
<213> Homo sapiens

<400> 17
Ile Ala Gly Val His Thr Leu Ser Gln Val Lys Gly Phe Val Arg
1 5 10 15

Lys Asn Gly Val Asn Glu Ala Lys Ile Asp Glu Ile Lys Asn Asp
20 25 30

Asn Val Gln Asp Thr Ala Glu Gln Lys Val Gln Leu Leu Arg Asn
35 40 45

Trp His Gln Leu His Gly Lys Lys Glu Ala Tyr Asp Thr Leu Ile
50 55 60

Lys Asp Leu Lys Lys Ala Asn Leu Cys Thr Leu Ala Glu Lys Ile
65 70 75

Gln Thr
77